

IN THE CLAIMS:

Claims 1 - 25 (Cancelled)

26. (Currently Amended) A fluid separating apparatus for separating liquids and solids from a fibrous material containing a multicomponent fluid, said apparatus comprising:

an upwardly sloping channel with a closed lower end and an outlet at the upper end;

an axially extending conveyor screw disposed in said channel;

a lower part of said channel forming a tilted floor segment of a filter tank with a closed end and an open end;

an upper part of said channel wherein the outlet projects beyond an edge of said filter tank in the closed tank end;

a separation material intake wherein the multicomponent fluid to be separated may be introduced, centered between the open and the closed end of said filter tank; and

a rotary filter unit disposed to be partially submerged in fluid contained in said filter tank and wherein said rotary filter unit is arranged at the open end of the filter tank; said filter tank having a width along an upper edge that increases along a longitudinal direction in a first section, remains about constant in a middle section in which the separation material intake is located, and tapers to a width of the channel in a third section.

27. (Previously Presented) The fluid separating apparatus of claim 26, wherein the channel is arranged at an angle of about 15° to 30° to horizontal.

28. (Previously Presented) The fluid separating apparatus of claim 27, wherein the channel is arranged at an angle of about 20° to horizontal.

29. (Previously Presented) The fluid separating apparatus of claim 26, wherein the filter tank has a cross section that tapers in a downward direction and has a roughly triangular shape in a vertical cross section.

30. (Canceled)

31. (Currently Amended) ~~The fluid separating apparatus of claim 26,~~ A fluid separating apparatus for separating liquids and solids from a fibrous material containing a multicomponent fluid, said apparatus comprising:

an upwardly sloping channel with a closed lower end and an outlet at the upper end;

an axially extending conveyor screw disposed in said channel;

a lower part of said channel forming a tilted floor segment of a filter tank with a closed end and an open end;

an upper part of said channel wherein the outlet projects beyond an edge of said filter tank in the closed tank end;

a separation material intake wherein the multicomponent fluid to be separated may be introduced, centered between the open and the closed end of said filter tank; and

a rotary filter unit disposed to be partially submerged in fluid contained in said filter tank and wherein said rotary filter unit is arranged at the open end of the filter tank; said filter tank has a width along an upper edge that increases along a longitudinal direction in a first section, remains about constant in a middle section in which the separation material intake is located, and tapers to a width of the channel in a third section; wherein a plurality of parallel baffles are spaced apart from one another and arranged in groups inside the filter tank, said baffles extending from one sidewall to another.

32. (Previously Presented) The fluid separating apparatus of claim 31, wherein said baffles are inclined at an angle of about 40° - 70°.

33. (Previously Presented) The fluid separating apparatus of claim 31, wherein said baffles have upper edges configured to lie below a liquid surface level and lower edges disposed above the conveyor screw.

34. (Previously Presented) The fluid separating apparatus of claim 31, wherein said baffles are provided over substantially the entire filter tank, and a first group of baffles between the separation material intake and one axial end of the filter tank is inclined in one direction, and a second group of baffles is inclined in an opposite direction.

35. (Currently Amended) ~~The fluid separating apparatus of claim 26,~~ A fluid separating apparatus for separating liquids and solids from a fibrous material containing a multicomponent fluid, said apparatus comprising:

an upwardly sloping channel with a closed lower end and an outlet at the upper end;
an axially extending conveyor screw disposed in said channel;
a lower part of said channel forming a tilted floor segment of a filter tank with a closed end and an open end;
an upper part of said channel wherein the outlet projects beyond an edge of said filter tank in the closed tank end;
a separation material intake wherein the multicomponent fluid to be separated may be introduced, centered between the open and the closed end of said filter tank; and
a rotary filter unit disposed to be partially submerged in fluid contained in said filter tank and wherein said rotary filter unit is arranged at the open end of the filter tank; said filter tank has a width along an upper edge that increases along a longitudinal direction in a first section, remains about constant in a middle section in which the separation material intake is located, and tapers to a width of the channel in a third section;
wherein a deflector baffle is disposed adjacent the separation material intake and opposite the rotary filter unit, said deflector baffle projecting downwardly to inhibit fluid flow from the separation material intake directly to the rotary filter unit; and
wherein said deflector baffle is approximately L-shaped with an angled section directed away from the rotary filter unit.

36. (Canceled)

37. (Currently Amended) ~~The fluid separating apparatus of claim 26,~~ A fluid separating apparatus for separating liquids and solids from a fibrous material containing a multicomponent fluid, said apparatus comprising:

an upwardly sloping channel with a closed lower end and an outlet at the upper end;
an axially extending conveyor screw disposed in said channel;
a lower part of said channel forming a tilted floor segment of a filter tank with a closed end and an open end;
an upper part of said channel wherein the outlet projects beyond an edge of said filter tank in the closed tank end;
a separation material intake wherein the multicomponent fluid to be separated may be introduced, centered between the open and the closed end of said filter tank; and
a rotary filter unit disposed to be partially submerged in fluid contained in said filter tank and wherein said rotary filter unit is arranged at the open end of the filter tank; said filter tank has a width along an upper edge that increases along a longitudinal direction in a

first section, remains about constant in a middle section in which the separation material intake is located, and tapers to a width of the channel in a third section;

wherein a gas injection unit is arranged in said filter tank.

38. (Previously Presented) The fluid separating apparatus of claim 37, wherein the gas injection unit has a plurality of gas injection apertures provided above the conveyor screw along sidewalls of said filter tank.
39. (Previously Presented) The fluid separating apparatus of claim 38, wherein said gas injection unit has at least three injection lines provided with spaced-apart injection nozzles and together with a transversely extending supply line form an approximately W-shaped structure, and wherein the two outer injection lines are arranged parallel to the sidewalls of the filter tank and the central injection line is arranged axially.
40. (Previously Presented) The fluid separating apparatus of claim 26, wherein the rotary filter unit comprises a disk filter unit with a rotary shaft extending perpendicularly to the channel and comprising at least one filter disk pair, wherein a discharge area communicating with a clear fluid outlet is provided between the filter disks of a filter disk pair, and a thick stock discharge is provided on the side of the filter disk pair that is opposite an intake area.
41. (Previously Presented) The fluid separating apparatus of claim 40, wherein approximately 1 to 10 disk pairs are mounted axially one behind the other.
42. (Previously Presented) The fluid separating apparatus of claim 41, wherein approximately 3 to 5 disk pairs are mounted axially one behind the other.
43. (Previously Presented) The fluid separating apparatus of claim 40, wherein said filter disks have a mesh construction.
44. (Previously Presented) The fluid separating apparatus of claim 43, wherein said filter disks comprise a support frame and wire gauze.

45. (Previously Presented) The fluid separating apparatus of claim 40 ~~44~~, wherein said wire gauze has two layers and comprises a coarse-meshed support fabric and a fine-meshed filtration fabric.
46. (Previously Presented) The fluid separating apparatus of claim 40, wherein said filter disks are sealed along their circumferential edge with respect to a housing.
47. (Currently Amended) ~~The fluid separating apparatus of claim 26,~~ A fluid separating apparatus for separating liquids and solids from a fibrous material containing a multicomponent fluid, said apparatus comprising:
an upwardly sloping channel with a closed lower end and an outlet at the upper end;
an axially extending conveyor screw disposed in said channel;
a lower part of said channel forming a tilted floor segment of a filter tank with a closed end and an open end;
an upper part of said channel wherein the outlet projects beyond an edge of said filter tank in the closed tank end;
a separation material intake wherein the multicomponent fluid to be separated may be introduced, centered between the open and the closed end of said filter tank; and
a rotary filter unit disposed to be partially submerged in fluid contained in said filter tank and wherein said rotary filter unit is arranged at the open end of the filter tank; said filter tank has a width along an upper edge that increases along a longitudinal direction in a first section, remains about constant in a middle section in which the separation material intake is located, and tapers to a width of the channel in a third section;
wherein said rotary filter unit comprises a drum filter unit with a rotating screening drum in the interior of which a conveyor spiral is mounted, the drum interior being chargeable with fluid from the filter tank.
48. (Previously Presented) The fluid separating apparatus of claim 47, wherein said conveyor screen has a decreasing pitch in a conveying direction.
49. (Previously Presented) The fluid separating apparatus of claim 48, wherein screening drum has a rotary axis at an angle to horizontal of about 5° - 20° and the conveying direction slopes upwardly.

50. (Previously Presented) The fluid separating apparatus of claim 47, wherein cleaning nozzles are disposed in said rotary filter unit for cleaning the screening drum and a collecting channel, which guides the cleaning fluid into the filter tank, is arranged below said cleaning nozzles.
51. (Previously Presented) The fluid separating apparatus of claim 26, wherein said rotary filter unit comprises a screening drum arranged inside the filter tank, said screening drum having a rotary axis approximately at a height of the open liquid surface level in the filter tank.
52. (Previously Presented) The fluid separating apparatus of claim 51, wherein a clear fluid discharge tube is provided concentrically to said rotary axis on at least one side.
53. (Currently Amended) The fluid separating apparatus of claim 49, wherein a skimming edge adjoins ~~the~~ a lateral surface along the exterior.
54. (Currently Amended) Apparatus for separating liquids and solids from a fibrous material containing multi-component fluid, comprising:
a filter tank having an open end and a closed end with a tilted floor segment;
an upwardly sloping conveying channel having a width and forming said floor segment of the filter tank, said channel having a lower end within the tank and an upper end projecting through said filter tank closed end and beyond said filter tank to define an outlet;
an axially extending conveying screw disposed in said channel;
a materials intake disposed in a mid-section of said tank; and
a rotary filter unit disposed in said filter tank open end and positioned to be partially submerged in fluid contained in said filter tank; said filter tank having a varying cross-section as viewed in a horizontal plane, the cross-section of a first section increasing from the open end to the mid-section, the cross-section of the mid-section being substantially constant, the cross-section of a third section tapering back to the width of the conveying channel .
55. (Canceled)
56. (Previously Presented) The separating apparatus of claim 54, further comprising a deflector baffle disposed within said filter tank with respect to said materials

intake such that fluid entering through said intake is deflected away from the rotary filter unit.